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How Good Is The Employment Trend? Decide for Yourself

The post-announcement commentary on last Friday's June employment report strikes us as about right: Not as spectacular as the 287,000 number the Bureau of Labor Statistics (BLS) reported for the month, but much better than the worst of our fears.

From the *Wall Street Journal*'s wrap-up of economist reaction, here's Joseph Brusuelas:

> The 147,000 three-month average is a fair representation what an economy at full employment looks like late in the U.S. business cycle. We anticipate that as the business cycle enters the final innings of the cyclical expansion that monthly job growth will slow towards 100,000, which represents the number necessary to stabilize the unemployment rate, which climbed to 4.9% in June due to an increase of 417,000 individuals that entered the workforce.

The consensus opinion is that observers should focus less on the monthly number and more on the three-month average, a vantage point we certainly endorse. We also think the reference point of the "number necessary to stabilize the unemployment rate" is the right way to decide whether a number like 147,000 net job gains is strong or not so strong.

The 100,000 unemployment-stabilizing job-gains statistic seems reasonable to us, but the average and median estimate from an April *Wall Street Journal* survey pegged the same statistic at 145,000. The three-month average job gain is comfortably above the former estimate but not the latter.

Where you stand on the number of job gains required to stabilize the unemployment rate is determined by your assumptions about the pace of civilian population growth (ages 16 and above), the labor force participation rate (LFPR), and the relationship between the payroll employment numbers and the comparable household survey statistic (from whence the unemployment rate is derived). Of course, you can always go to the Atlanta Fed's very own Jobs Calculator and input your assumptions yourself. But if you are like us, you may be more inclined to think in terms of a range of plausible numbers.

Here's our take on what some reasonable bounds on these assumptions might look like.

With respect to population growth, we assume a baseline growth rate equal to the same 1.0 percent annual rate that it has grown over the past year—after accounting for the artificially large population increase of 461,000 in January resulting from the BLS incorporating updated population estimates from the U.S. Census Bureau—with high and low growth alternatives of plus and minus one-tenth of a percentage point.

Second, our baseline for the LFPR is a decline of 0.226 percentage points per year, essentially the impact that we would attribute to age- and sex-related demographic changes over the past two years. Our low-side alternative assumption would be a larger 0.386 annual percentage decline in the LFPR, which adds in the average decline in the participation rate since February 2008 not due to demographic changes. Our high-side assumption is that the LFPR remains at its current level.

Finally, we note that the ratio of employment measured by the BLS payroll survey to employment measured by the household survey has been drifting up for several years. We have chosen a baseline assumption equal to the trend in this ratio since August 2005, and a high-side assumption chooses the steeper trajectory realized since February 2008. Since both August 2005 and February 2008, the unemployment rate has been unchanged, on balance.

The three scenarios for each assumption, in all combinations, yield 27 different implications for the number of payroll jobs required to maintain the unemployment rate at its current level (see the table).

Employment Growth Necessary to Maintain the Unemployment Rate under Various Scenarios

Change in payroll employment to household survey employment ratio (percentage points per year)*	Change in labor force participation rate (percentage points per year)	Population growth (percent per year)	Breakeven payroll growth per month needed to keep unemployment rate constant (in thousands)
Low (None)	Low (Decline −0.386)	Low (0.9)	34
Low (None)	Low (Decline −0.386)	Baseline (1.0)	46
Low (None)	Low (Decline −0.386)	High (1.1)	57
Low (None)	Baseline (Decline −0.226)	Low (0.9)	64
Low (None)	Baseline (Decline −0.226)	Baseline (1.0)	76
Low (None)	Baseline (Decline −0.226)	High (1.1)	88
Low (None)	High (No change)	Low (0.9)	108
Low (None)	High (No change)	Baseline (1.0)	120
Low (None)	High (No change)	High (1.1)	131
Baseline (Increase 0.031)	Low (Decline −0.386)	Low (0.9)	38
Baseline (Increase 0.031)	Low (Decline −0.386)	Baseline (1.0)	49
Baseline (Increase 0.031)	Low (Decline −0.386)	High (1.1)	61
Baseline (Increase 0.031)	Baseline (Decline −0.226)	Low (0.9)	68
Baseline (Increase 0.031)	**Baseline (Decline −0.226)**	**Baseline (1.0)**	**80**
Baseline (Increase 0.031)	Baseline (Decline −0.226)	High (1.1)	92
Baseline (Increase 0.031)	High (No change)	Low (0.9)	112
Baseline (Increase 0.031)	High (No change)	Baseline (1.0)	124
Baseline (Increase 0.031)	High (No change)	High (1.1)	135
High (Increase 0.091)	Low (Decline −0.386)	Low (0.9)	45
High (Increase 0.091)	Low (Decline −0.386)	Baseline (1.0)	57
High (Increase 0.091)	Low (Decline −0.386)	High (1.1)	69
High (Increase 0.091)	Baseline (Decline −0.226)	Low (0.9)	76
High (Increase 0.091)	**Baseline (Decline −0.226)**	**Baseline (1.0)**	**88**
High (Increase 0.091)	Baseline (Decline −0.226)	High (1.1)	100
High (Increase 0.091)	High (No change)	Low (0.9)	119
High (Increase 0.091)	High (No change)	Baseline (1.0)	131
High (Increase 0.091)	High (No change)	High (1.1)	143

*Note: The baseline assumption uses the average change in payroll survey employment to household survey employment since August 2005. The high assumption uses the average change since February 2008. Household survey employment has been smoothed by the BLS for population control adjustments.

Source: Federal Reserve Bank of Atlanta

These calculations generate a range of about 40,000 jobs per month to about 140,000 jobs per month. Our baseline assumptions suggest the unemployment rate would stabilize at payroll gains of about 80,000 per month, making the roughly 150,000 monthly average seen during the past quarter of a year look pretty good.

But we're not here to convince you of that today. You've got the numbers above. As we said at the outset, you can decide for yourself.

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